



Congratulations and thank you for purchasing Zero-G EPICA.

EPICA was designed to be quick and easy to design and shape your sounds without limiting creativity. Whilst it comes with 600 presets, the custom interface screams at you to design your own sounds.

What is EPICA?

EPICA was originally going to be an EPIC String and Pad library aimed at Film, TV and Game Composers but very quickly evolved into a beautiful library that would benefit any music creation.

After finishing my last library PHAEDRA I set about taking this library to the next level. EPICA's samples have all been recorded through a chain of 100% boutique hardware equipment with NO plugins used in the creation of the source sounds. I wanted a library that offered a fresh palette of sounds rich in timbre that would set your music apart from the masses.

The sound of EPICA is rich, full and 'Real', its presets just fit into your projects ready to go. I have always found that virtual synths need a lot of work to make them fit into mixes, to my ears they always have a plastic two-dimensional sound to them. EPICA instantly sounds like it has come off a record from the beginning as the sound sources are from real hardware instruments and 100% hardware processors. You will find that you do not need to reach for the compressor, eq or other plug-ins as EPICA just sounds so good on its own.

All samples were hand looped and with Kontakt key mapping never stretching a sample more than 1 note from its root they sound as real as the instruments they came from. In fact all of the non-looped samples are mapped to every key for 6 octaves with a large amount of them 3 to 4 x Round Robins on every key.



Technical Recording Data

Samples were processed through various top of the range equipment including Eventide H8000FW, UBK FATSO, Neve 1073 preamp, Lexicon PCM 96 and various analog guitar pedals.

My particular favourite was the Eventide H8000FW which just adds a beautiful sheen to anything it touches, but a big shout has to go to the amazing UBK Fatso hardware giving all the recordings that lovely hardware thick feel to all that pass through it.

Samples were themselves sourced from Various analog synths from my home built Modular System, Arp Odyssey Mk3, Sequential Pro-1, Yamaha CS-30, Oberheim's and Future Retro to digital synths like the Virus Ti, DX9 and Roland D-50. Real life recordings were also used.

600 presets using 17,247 recordings were made, all at 24bit 44.1khz totalling 13GB of raw sample recordings. No dead space and all obsessively hand looped by a human (me) rather than an auto looping program (no dodgy loop points here).

Some Multi presets have Reverb type effects from hardware units such as the Eventide H8000FW and Lexicon PCM96. Instead of recording the presets with the reverb on them I sampled the reverb separately. This enables you to dial in how much reverb and also to synthesize it as you wish, you will be amazed at how real this sounds and how much it can increase sound design.

A lot of libraries are recorded extremely hot, what do I mean by hot?

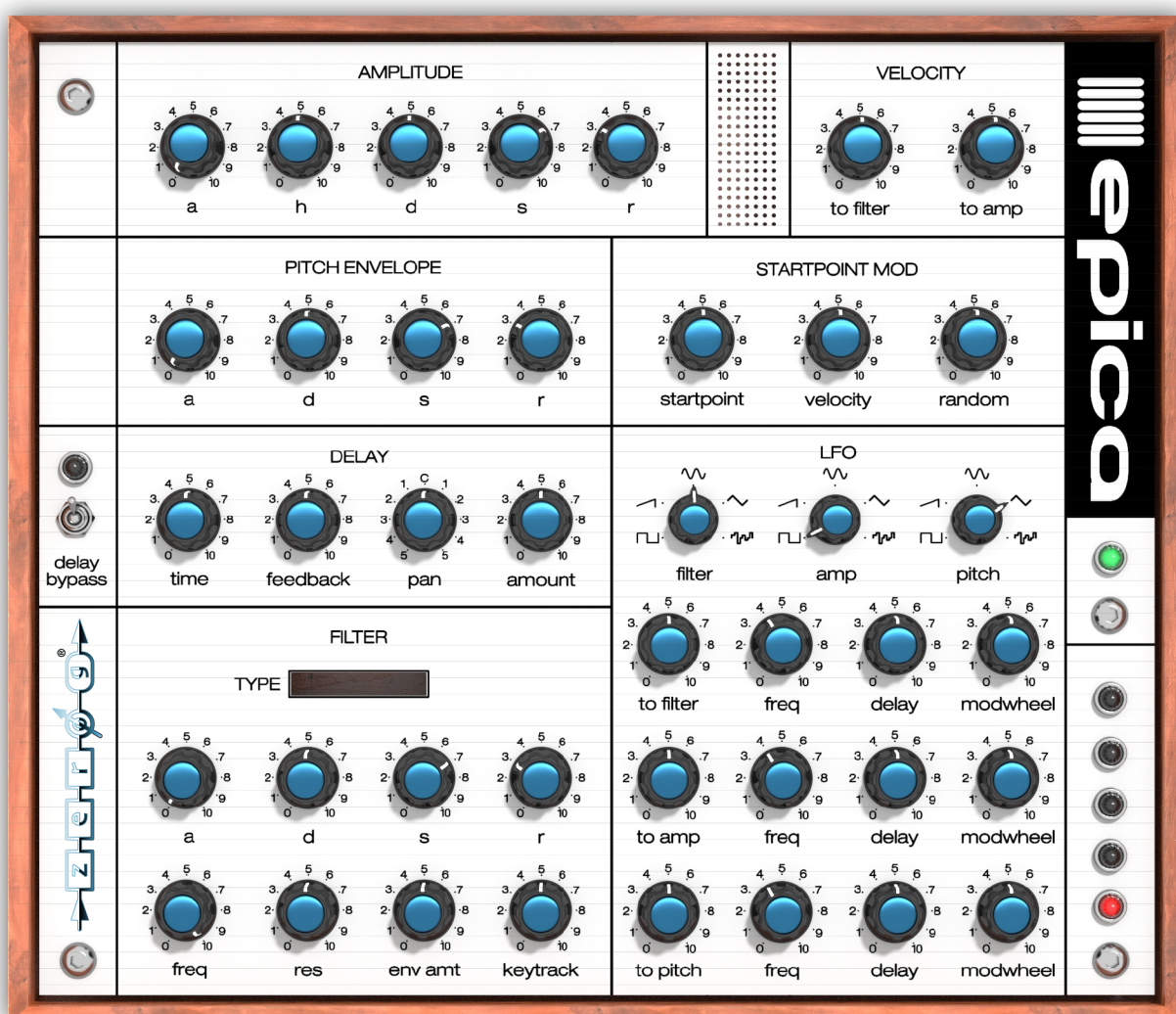
There is no need with a 24 bit high end A/D converter to record right up to 0db, in fact nearly all sound cards sound better in the -12 to -6db range. The problem with recording so hot is that you can very easily overload plugins but within the context of the Kontakt 5 engine you can also overload the modules inside it, for example the Filters.

Giving the recordings the correct headroom makes for a much more natural and honest to the source sound. The key to a great sound when using digital devices is to not overload any plugins with a signal that is too hot.

Getting Started.....

Here is the main EPICA interface with everything you need to create your sound. Power is nothing without control. The Graphical User Interface (GUI) was designed to give the user full control over a huge amount of sonic sculpting options. The real challenge was to do this without slowing down the creative process. I believe we have succeeded with this interface. It is both quick and simple to use but devastatingly powerful when creating your own presets...which you will find yourself doing within seconds.

Over the next few pages I will go into more depth on how to fully use the interface.



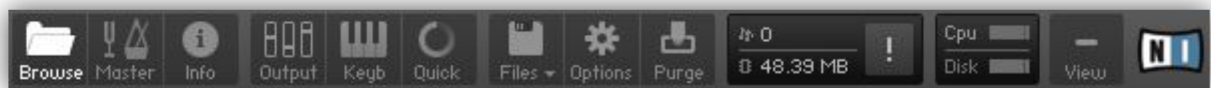
Loading presets

We've made some great presets to get you started, 600 in total. You will love how they instantly sound part of your song with no EQ or Compression needed, they sound for want of a better phrase "Warm, real just like a record". Epica sounds like ...well...Epica, it is unique in its tone and versatility offering sounds that you just cannot get with other synths.

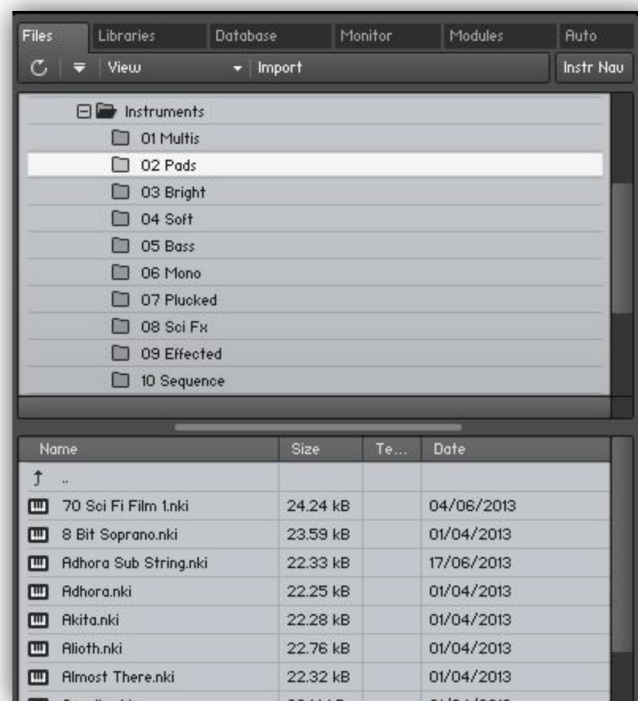
So let's go through some presets, you might find yourself playing for longer than you had expected so have the coffee/tea at the ready...

Preset Interface

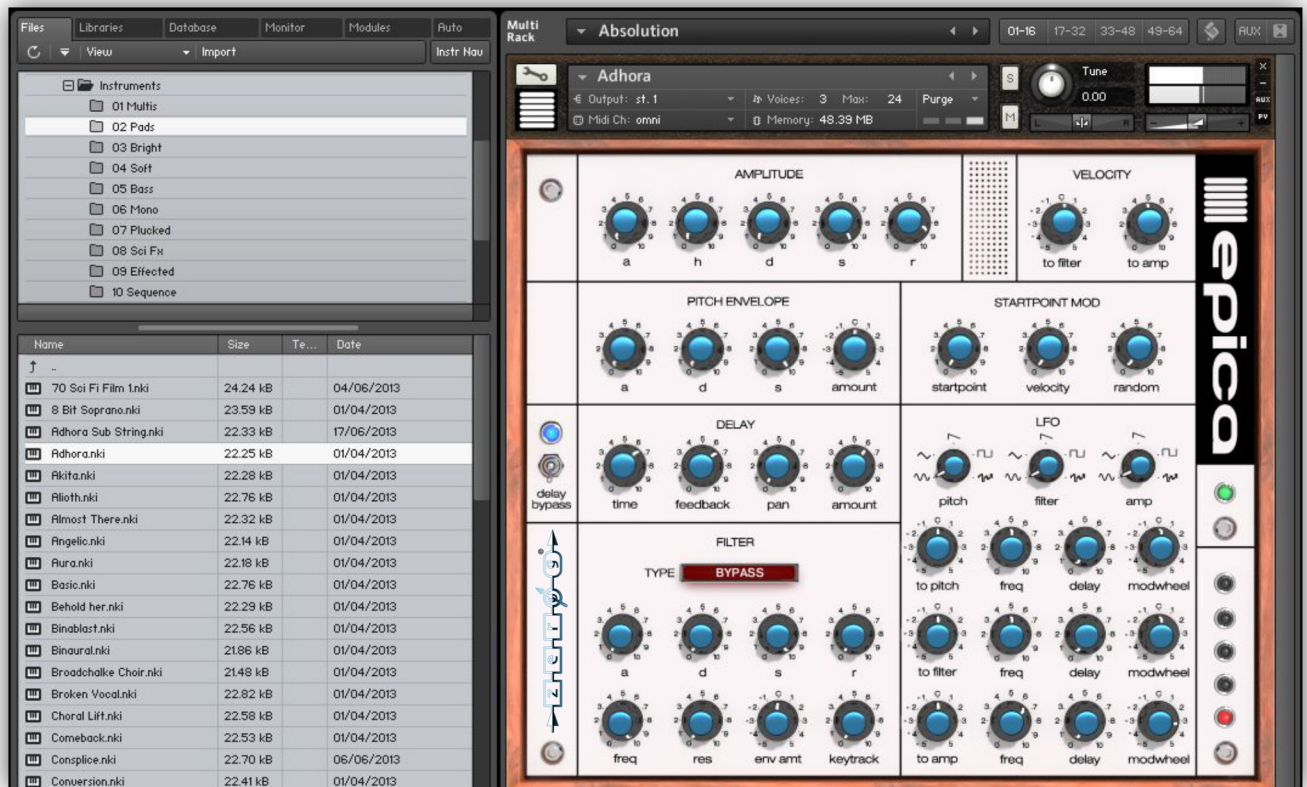
On loading EPICA you should be presented with the main interface and also the Browser interface. If the Browser interface is not in view then simply click on the 'Browse' icon on the top toolbar.



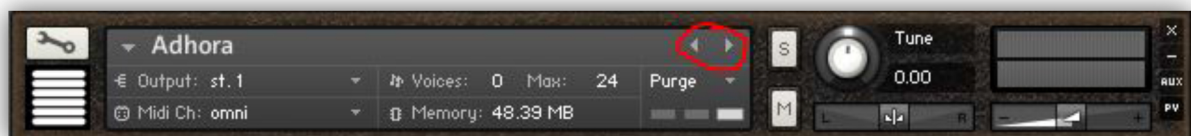
On the left you will have a selection of folders, each of these folders will be full of presets. Simply (for example), select for example the '**Pads**' Folder and below will be all the presets that are in the pads category.



Let us select the '**Adhora**' pad preset with the left mouse button and drag it to the blank section of Kontakt Player on the right (you can also launch a preset by double clicking it).



Now to try another preset there are two ways of doing this, you can either just drag another preset from any of the folders and drop it onto the one you have or you can select the previous or next preset in the folder by clicking the left or right arrow as shown below. To get rid of a preset you just click the 'X' in the top right window of that preset.



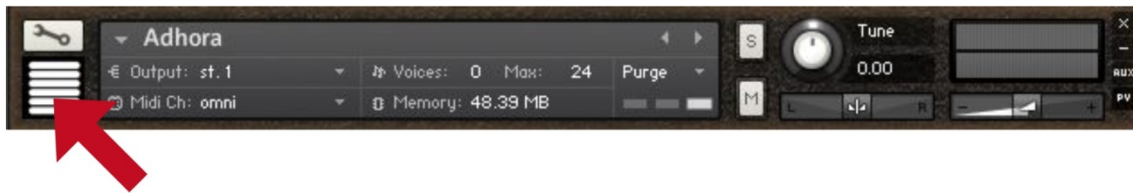
If however you double click on a preset in the browser it will add that preset alongside the one you have, which is great for making huge sounds (you will find many of these in the 'Multi' preset folder).

A lot of the preset's have many samples so depending on how fast your hard drive is make sure they have loaded before playing.

Top Tip: Solid State Data (SSD) hard drives are now so cheap that it is a good idea to have one for your samples drive. Huge presets like the 'Alioth' pad 83mb take less than a second to fully load up on my SSD drive.

Epica Interface

To Minimise the GUI so as to concentrate on other presets simply click as per the red arrow below. Clicking it again



This part of the GUI allows you to also choose the following:

Output: Choose the audio out channel of the preset

Voices: How many notes of Polyphony you would like for that preset, useful for changing monophonic sounds to Polyphonic. It is also great for lowering the amount of CPU a preset uses by restricting the amount of notes it can play.

Midi Ch: Which midi channel you want the preset to respond to, Omni setting is used when making a huge sound from lots of presets as Omni mode will set the preset to receive from any of the 16 midi channels.

Memory: Shows you how much memory (RAM) a preset is using, the 3 rectangles to the right of this show you how much of the preset is to be loaded.

There are also **Tune**, **Balance** and **Volume** adjustments. As with all adjustment, to fine tune them just hold the 'Shift' key on the QWERTY keyboard when moving the adjustment control with the mouse.

The Epica Synthesizer

You should think of the presets that you load as the raw oscillators for your sound creation. This is where Epica excels as the sound sources come from a huge range of analog and digital hardware recorded through a very boutique chain of analog hardware.

The samples are very long and have been obsessively sampled and looped by hand. A lot of the sounds use the actual analog filter sweeps of the synthesizers that they were sampled from and implemented using sample start points assigned to either velocity or random so as to enable the true sound of the sampled synth.

That being said, Kontakt 5's newly modelled filters are astoundingly good and give a huge palette of sonic possibilities to anything you create.

The rest of the synthesizer engine is broken down into the following parts:

Amplitude



This is the Amplitude Envelope Generator that controls the volume of the synth. Unlike most VCA ADSR's Kontakt 5 has added a 'Hold' function, which can be very useful.

A: Attack is the initial bite of a sound. It can be instant, for example bass or a slow increase in volume for, say, strings

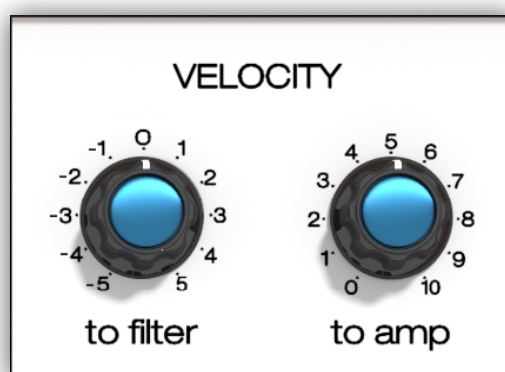
H: Hold keeps the synth at full volume for a set time before passing it on to the decay phase.

D: Decay controls how slow the sound fades to the volume set by the Sustain knob.

S: Sustain sets the volume that the synth will stay at until the note is released.

R: Release controls how long the note will continue sounding after you release the key.

Velocity



You can assign Velocity (how hard you hit the notes) to:

To Filter: If you are using one of the 6 analog modelled filters available in Epica then you can further control the filter by Velocity. 0 to +5 increases the Filter setting depending on how hard you hit the note whilst -5 to 0 decreases the Filter depending on how hard you hit the note.

To Amp: This basically allows you to adjust the volume of the sound by how hard you hit the note. When emulating analog mono synths it is best set to 0.

Pitch Envelope



With its **Attack**, **Decay** and **Sustain** controls the Pitch Envelope is great for creating all sorts of effects. The amount that the pitch is affected by the **Attack**, **Decay** and **Sustain** controls can be determined by the **Amount** knob. This works from -5 to +5, which means that you can have a pitch either climbing or falling.

Start Point Mod



Personally, for me, this is my favourite control in Epica as it enables you to use the actual synthesizer filter that was sampled. When you move the Startpoint knob it basically just plays further along the

sample and the Velocity knob will assign Note Velocity between the Startpoint knob setting and the Velocity knob setting.

When say a Sequential Pro-1 preset with a filter sweep has been sampled you can now play the sample back at different points of the sweep using either the Velocity or Random knobs. Or you can lock it into place with the StartPoint knob.

But it comes into its own when using a tiny amount of the Random knob (by holding Shift key and moving the knob with mouse) because this gets rid of the issue that I have always had with samplers.....it stops the sample from starting at the same start point in the oscillator. An analog synth's oscillators are always running so they never start in the same place twice. However, by assigning a small amount of the Random knob to the start point of the sample you ensure that the sample never gets played from the same point either. It's a big part of why analog sounds so...analog.

Using the Startpoint Mod controls alone, you have access to a huge palette of different sounds using the same preset. Experiment, the whole interface screams "*Abuse me!*".

Assigning your controller's Modulation Wheel to Startpoint (how to do this will be explained later in this manual) can create some truly amazingly playable synth creations with the Mod Wheel controlling the 'Actual' real world synth filter.

Because the Amplitude AHDSR is so fast you might need to add a tiny amount of Attack to the Amplitude AHDSR so as to avoid any clicks when using/abusing the Startpoint controls. This is because the starting point of the waveform might fall either above or below the 0DB line thus creating a click.

Delay



We decided to only use the Delay as an effect in Epica because we all have so many reverb and multi FX at our disposal in our digital workstations that if you wanted an effect you could always add your own. If I had to choose one effect to take with me on my studio desert island it would be Delay.

When a Reverb or Multi FX was needed for a preset I tended to record the samples through the awesome Eventide H-8000 FW or Lexicon PCM 96.

Delay Bypass: You can Bypass the delay by clicking on the Bypass switch.

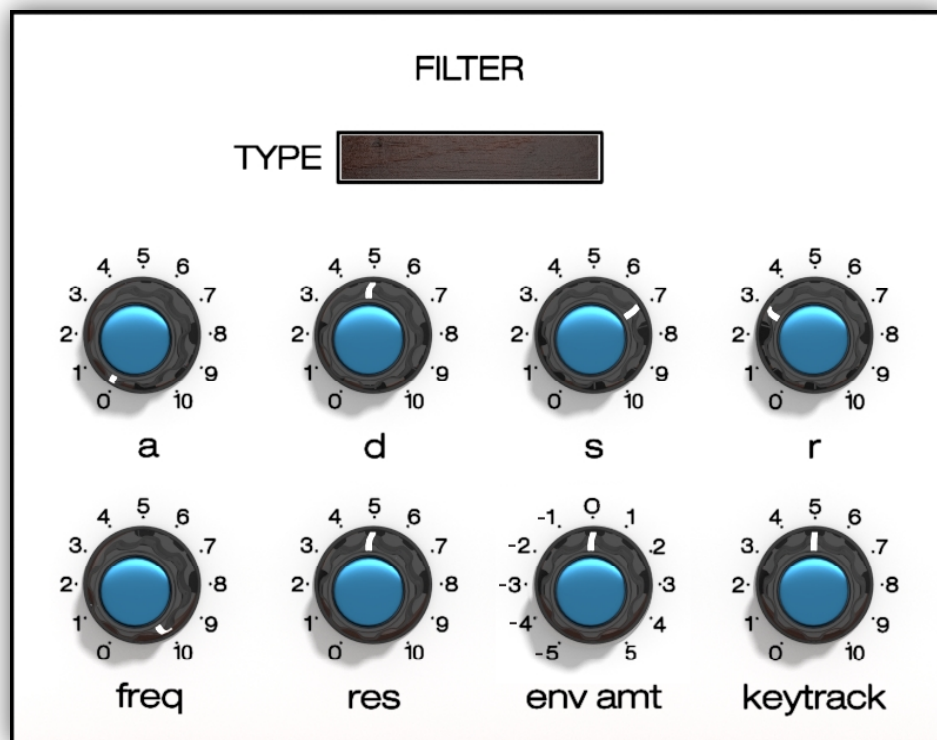
Time: Time basically is the divisions of time for the Delay set to the BPM of your workstation.

Feedback: Adjusts the amount of delay that is fed back on itself or in layman's terms...the number of echoes!

Pan: This control determines whether the Delay will be mono or ping pong in stereo.

Amount: How loud you want the Delay to be in comparison to the source sound.

Filter



You can select one of the 6 filter types by clicking in the 'Type' Box and choosing a filter from:

- Lowpass 12db
- Lowpass 24db
- Highpass 12db
- Highpass 24db
- Bandpass 12db
- Bandpass 24db

All the filters are of the Ladder type, analog modelled and surprisingly good for a digitally modelled filter.

The ADSR knobs have the same functions as the Amplitude Envelope part of Epica except that they obviously control the Filter. It also does not have a Hold function.

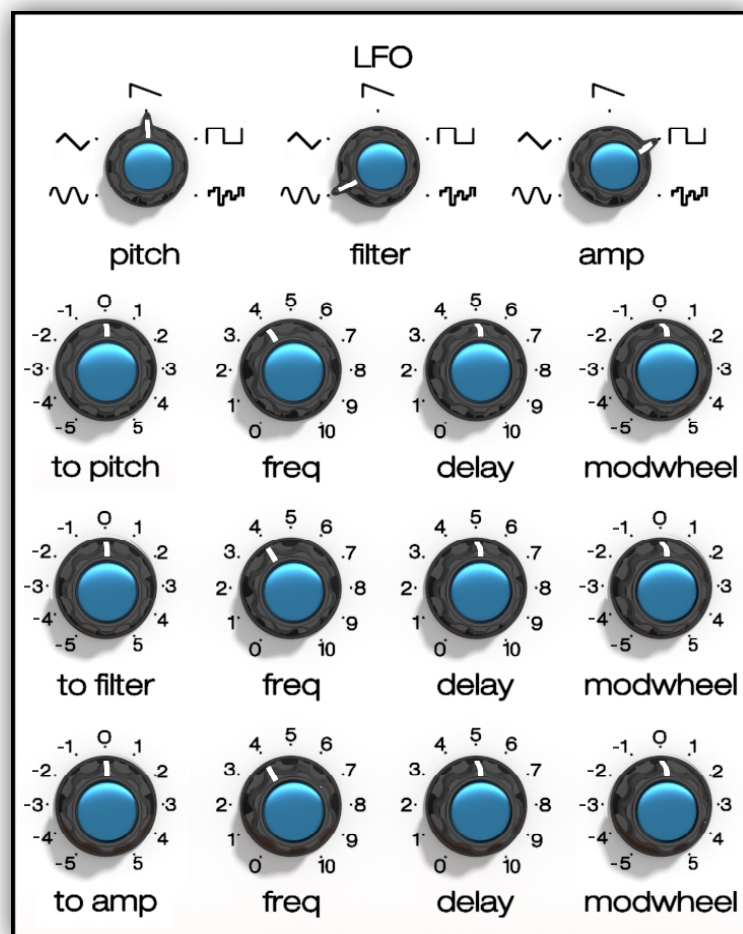
Freq: Controls how much the Filter is initially opened or closed. If you right click on the Filter knob you can assign a controller like say the Modulation Wheel to it. This gives a huge controllability to the sound.

Res: This controls the Resonance peak of a filter, the higher the setting the more it will be affected when the filter is swept. Think high resonance for those TB-303 squelchy type sounds. If you are not au fait with how filters work it would be best to look up on the Internet about Filter Resonance and Filters in general as it is beyond the scope of this manual.

Env Amt: This knob controls how much the Filter is controlled by the ADSR section. It can be set to negative -5 to 0 and positive 0 to +5.

Keytrack: Is for when you want the Filter to open up as you play up the octaves on the keyboard making a sound brighter as you play higher notes.

LFO



Epica has 3 x LFO's and each LFO has 5 Waveforms: Sine, Triangle, Saw, Square and Random.

They can be assigned to **Pitch**, **Filter** and **Amp** (Volume). LFO stands for Low Frequency Oscillator which can be thought of as a slower non audible wave which can be used to control a particular section of a synthesizer.

Taking a look at the Pitch LFO controls:

To Pitch: This assigns how much the Pitch destination is assigned to the LFO, this can be Negative -5 to 0 or Positive 0 to +5.

Freq: This is the speed of the LFO, how fast it modulates.

Delay: Delay is basically an Attack Envelope for the LFO. It will gradually fade in the LFO. The higher the number the longer the delay. It can be very useful for sound creation.

Modwheel: You can control the LFO by the Modulation Wheel on your controller by using this knob, this can be Negative -5 to 0 or Positive 0 to +5. This is how you add the classic vibrato effect to be controlled by the Mod Wheel that is common to most synthesizers.

You might have to use the shift key on your keyboard to go into fine tune mode on some of the controls on the LFO section as it is quite sensitive. This was needed so as to give you full control from slight to extreme in the way the LFO interacts with the Synthesizer.

Assigning Epica functions to your midi controller

You can very quickly use your midi controller to control any knob on Epica simply by right mouse clicking on the knob you wish to control. Then select 'Learn Midi CC# Automation', at this point you just move the hardware controller that you want assigned to that knob.

For further control you can limit where the assigned knob starts from and ends when linked to your hardware controller.

In the picture below you can see on the left where you would normally select the presets to load, at the top there is a Tab called 'Auto'. If you click the Auto tab you will be taken to the Automation screen which shows any midi CC Controllers that are assigned to any Epica functions. It will default to 'Host Automation' so select 'Midi Automation' to show any midi controller data. Selecting a Midi CC allows you, at the bottom of the picture, to define low and high settings. You can go Negative to Positive and also Positive to Negative. And you can have, for example, the Modulation Wheel Controlling the Filter Cut off, Delay amount and also the Filter Resonance as many sources and destinations as you can think of!

We hope that you enjoy using Epica as much as we have creating it.

Go create!

Zero-G Limited / xfonc limited

FilesLibrariesDatabaseMonitorModulesAuto

Host AutomationMidi Automation

in order to automate, drag to a knob or fader:

| MIDI CC | assigned to |
|---------|------------------------|
| CC 0 | not assigned |
| CC 1 | Filter Cutoff - Adhora |
| CC 2 | not assigned |
| CC 3 | not assigned |
| CC 4 | not assigned |
| CC 5 | not assigned |
| CC 6 | not assigned |
| CC 7 | not assigned |
| CC 8 | not assigned |
| CC 9 | not assigned |
| CC 10 | not assigned |
| CC 11 | not assigned |
| CC 12 | not assigned |
| CC 13 | not assigned |
| CC 14 | not assigned |
| CC 15 | not assigned |
| CC 16 | not assigned |
| CC 17 | not assigned |
| CC 18 | not assigned |
| CC 19 | not assigned |
| CC 20 | not assigned |
| CC 21 | not assigned |
| CC 22 | not assigned |
| CC 23 | not assigned |
| CC 24 | not assigned |
| CC 25 | not assigned |
| CC 26 | not assigned |
| CC 27 | not assigned |
| CC 28 | not assigned |
| CC 29 | not assigned |
| CC 30 | not assigned |

Multi Rack

New (default)

Adhora

Output: st. 1Voices: 0 Max: 24

Midi Ch: omniMemory: 48.39 MB

AMPLITUDE

a h d s

PITCH ENVELOPE

a d s amount

DELAY

time feedback pan amount

FILTER

TYPE BYPASS

a d s r

freq back

Learn MIDI CC# Automation

Remove MIDI Automation: CC# 1 (1 group)

assigned to:

| parameter | inst. | group |
|--------------|--------|-------|
| Filter Cu... | Adhora | - |

From % 50.0

To % 88.0

Soft Takeover

Remove

ZERO-G EPICA KONTAKT SYSTEM REQUIREMENTS

Windows

Windows 7 or Windows 8 (latest Service Pack, 32/64-bit), Intel Core 2 Duo or AMD Athlon 64 X2, 2 GB RAM (4 GB recommended)

Mac

Mac OS X 10.7 or 10.8 (latest update), Intel Core 2 Duo, 2 GB RAM (4 GB recommended)

SUPPORTED INTERFACES

- Stand-alone
 - VST
 - Audio Units
 - RTAS (Pro Tools 9 + 10)
 - ASIO
 - CoreAudio
 - WASAPI
 - AAX Native (Pro Tools 10)
 - 64-bit AAX plugins (Pro Tools 11)
-